

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-100. (Cancelled)

101. (Previously Presented) A method of manufacturing a microelectronic substrate, comprising:

positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine, the planarizing film having a plurality of microfeatures having a plurality of first raised features having first peaks at a first height defining support points to contact the substrate and a plurality of second raised features having second peaks at heights less than the first height, the second raised features being interspersed between the first raised features; and

engaging the substrate with the plurality of microfeatures to planarize a surface of the substrate.

102. (Previously Presented) The method of claim 101, wherein engaging the substrate with the plurality of microfeatures further comprises moving at least one of the substrate and the planarizing film with respect to the other to translate the substrate across the planarizing film.

103. (Previously Presented) The method of claim 101, further comprising disposing a planarizing solution on a surface of the planarizing film; and wherein engaging the substrate with the plurality of microfeatures further comprises entrapping at least a portion of the planarizing solution between the plurality of first raised features and the plurality second raised features.

104. (Previously Presented) The method of claim 103, wherein entrapping at least a portion of the planarizing solution between the plurality of first raised features and the plurality second raised features further comprises restraining a flow of the planarizing flow on the planarizing film; and

retaining a substantially uniform and contiguous distribution of the planarizing fluid between the plurality of first raised features and the plurality second raised features.

105. (Previously Presented) The method of claim 101, wherein positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine further comprises disposing a polymeric planarizing film on the support base that has a plurality of microfeatures that are embossed on the film in a substantially repetitive arrangement.

106. (Previously Presented) The method of claim 101, wherein positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine further comprises disposing a polymeric planarizing film on the support base that has a plurality of microfeatures that are embossed on the film in a substantially random arrangement.

107. (Previously Presented) The method of claim 101, wherein positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine further comprises disposing a fine woven mesh on the support base having a plurality of first raised features defined by high points along the strands, and having a plurality of second raised features defined by a remainder of the strands.

108. (Previously Presented) The method of claim 101, wherein positioning a non-abrasive and incompressible planarizing film on a support base further comprises:

wrapping a flexible web having the plurality of microfeatures around a supply roller and a take up roller; and

extending a portion of the flexible web across the support base.

109. (Previously Presented) The method of claim 108, further comprising retaining a first portion of the web at a work station while a first substrate is planarized; and advancing the web to position a second portion of the web at the work station to planarize a second substrate.

110. (Previously Presented) The method of claim 101, wherein positioning a non-abrasive and incompressible planarizing film on a support base further comprises removably attaching the planarizing film to the support base.

111. (Previously Presented) A method of manufacturing a microelectronic substrate, comprising:

positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine, the planarizing film having a plurality of nodules having a plurality of shapes and heights, the nodules being patterned on the film to form a plurality elevated support points to contact the substrate and a plurality of depressions between the elevated support points; and

engaging the substrate with the plurality of nodules to planarize a surface of the substrate.

112. (Previously Presented) The method of claim 111, wherein engaging the substrate with the plurality of nodules further comprises moving at least one of the substrate and the planarizing film with respect to the other to translate the substrate across the planarizing film.

113. (Previously Presented) The method of claim 111, further comprising disposing a planarizing solution on a surface of the planarizing film; and wherein engaging the substrate with the plurality of nodules further comprises entrapping at least a portion of the planarizing solution between the plurality of nodules.

114. (Previously Presented) The method of claim 113, wherein entrapping at least a portion of the planarizing solution between the plurality of nodules comprises restraining a flow of the planarizing flow on the planarizing film; and

retaining a substantially uniform and contiguous distribution of the planarizing fluid between the plurality of nodules.

115. (Previously Presented) The method of claim 111, wherein positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine further comprises disposing a polymeric planarizing film on the support base that has a plurality of nodules that are embossed on the film in a substantially repetitive arrangement.

116. (Previously Presented) The method of claim 111, wherein positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine further comprises disposing a polymeric planarizing film on the support base that has a plurality of nodules that are embossed on the film in a substantially random arrangement.

117. (Previously Presented) The method of claim 111, wherein positioning a non-abrasive and incompressible planarizing film on a support base of a planarizing machine further comprises disposing a fine woven mesh on the support base having a plurality of first raised features defined by high points along the strands, and having a plurality of second raised features defined by a remainder of the strands.

118. (Previously Presented) The method of claim 111, wherein positioning a non-abrasive and incompressible planarizing film on a support base further comprises:

wrapping a flexible web having the plurality of nodules around a supply roller and a take up roller; and

extending a portion of the flexible web across the support base.

119. (Previously Presented) The method of claim 118, further comprising retaining a first portion of the web at a work station while a first substrate is planarized; and advancing the web to position a second portion of the web at the work station to planarize a second substrate.

120. (Previously Presented) The method of claim 111, wherein positioning a non-abrasive and incompressible planarizing film on a support base further comprises removably attaching the planarizing film to the support base.